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September 16, 2016

CAW Issaquah LLC
Silver Cloud Building
103 18th Avenue SE, Suite 300
Bellevue, WA 98005

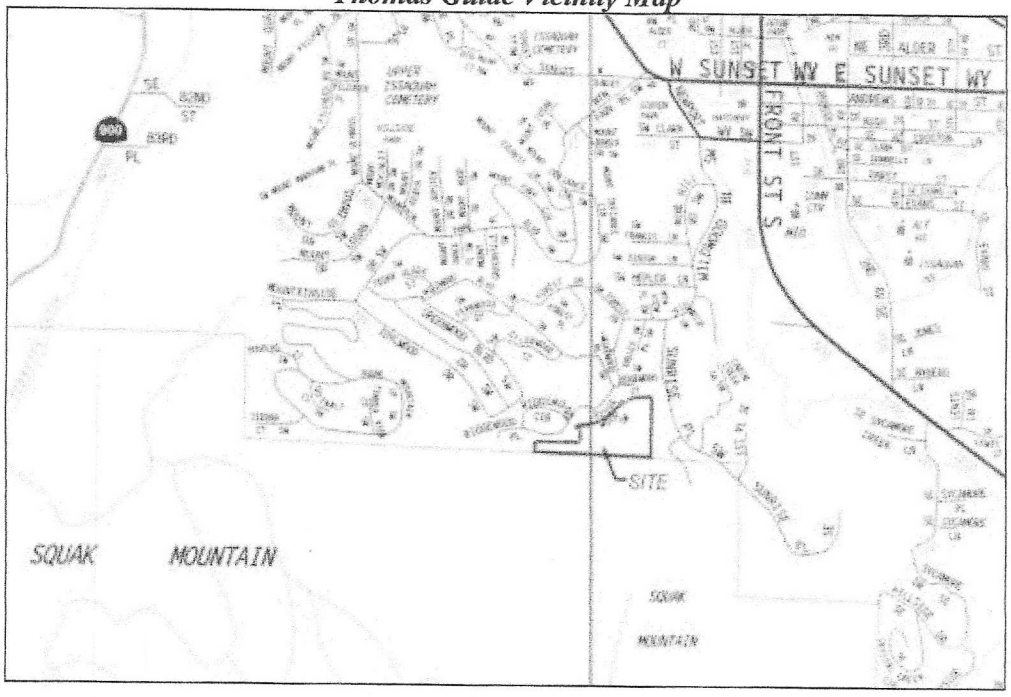
RE: *Revised* Critical Area Report – Swauk Mountain Plat
City of Issaquah, Washington
SWC Job #15-183

1.0 INTRODUCTION

1.1 Location

This report describes the jurisdictional wetlands and streams located on the "Swauk Mountain Plat", formerly known as the "Issaquah Terrace" property. The 20 acre property is located to the southeast of Ridgewood Circle SW and to the southwest of Sunrise Place SE (parcel 3324069508) in the City of Issaquah, Washington.

Thomas Guide Vicinity Map



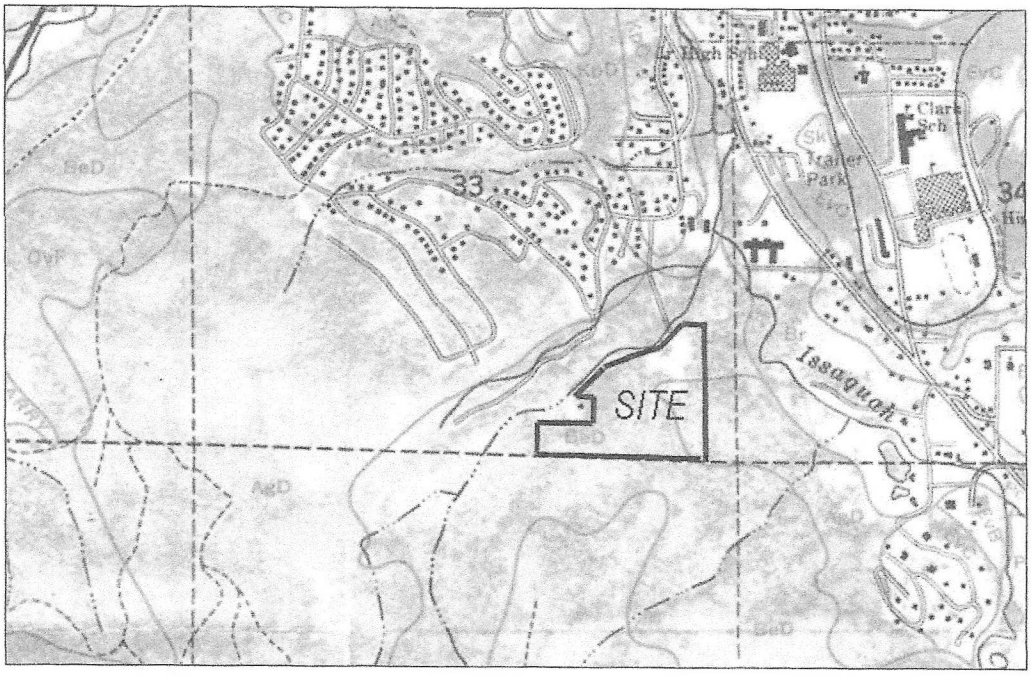
3.0 OBSERVATIONS

3.1 Existing Site Documentation

Prior to visiting the site, a review of several natural resource inventory maps was conducted. Resources reviewed included the King County Soil Survey, King County Sensitive Areas Folio: Wetlands, King County Wetland Inventory, King County Sensitive Areas Folio: Streams, A Catalog of Washington Streams and Salmon Utilization, and the National Wetland Inventory.

3.1.1 King County Soil Survey

According to the King County Soil Survey, the site contains portions of Beausite gravelly sandy loam (BeD), which typically occurs on slopes of 15-30 percent, and Alderwood gravelly, sandy loan (AgD); which typically occurs on slopes of 6-15 percent. Beausite gravelly sandy loam soils area made up of well-drained soils that were formed in glacial deposits. Alderwood soils are moderately well drained soils that formed under conifers, in glacial deposits. According to the publication, *"Hydric Soils of the United States"* Beausite and Alderwood gravelly, sandy loam soils are not considered to be hydric or *wetland* soils. A stream is depicted along the northwest side of the site.

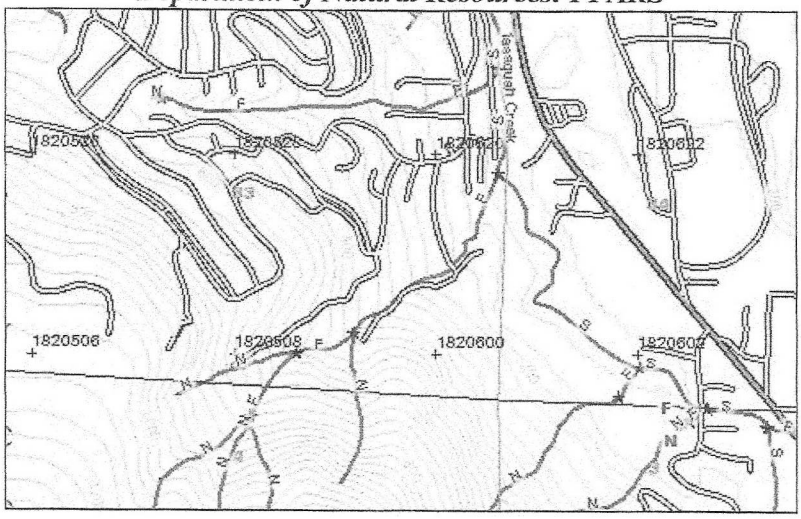


3.1.2 King County Sensitive Areas Folio: Streams

According to the King County Sensitive Areas Folio: Streams, there is an unclassified stream located along the western/northwest property boundary.

southwest property corner. This feature is labeled as a Type N stream (non-fish), with the change in rating at the confluence of the tributary stream.

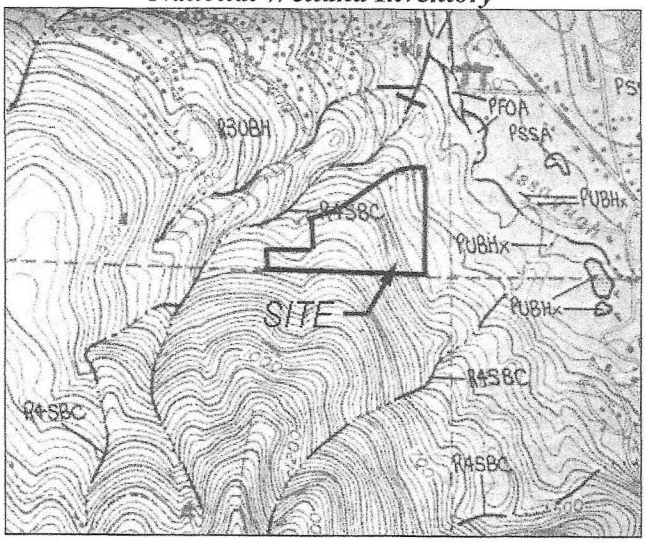
Department of Natural Resources: FPARS



3.1.5 National Wetland Inventory

According to the National Wetland Inventory, there is a R4SBC (riverine, intermittent, streambed, seasonally flooded) stream located along the western property boundary.

National Wetland Inventory



3.2 Uplands

The site is forested with both conifer and deciduous trees and has a shrub under story. Vegetation within the uplands includes Douglas fir (*Pseudotsuga menziesii*), western red cedar (*Thuja plicata*), big leaf maple (*Acer macrophyllum*), beaked hazelnut (*Corylus cornuta*), vine

Wetland D/DD is a slope wetland adjacent to Stream D with shrub and emergent vegetative communities. Vegetation within Wetland D/DD inclused salmonberry (*Rubus spectabilis*), devils club (*Oplopanax horridum*), lady fern, fringe cup (*Tellima grandiflora*) and giant horsetail (*Equisetum telmateia*).

Soil pits excavated within the wetland revealed a 16-inch layer of sandy silt loam with a color of 10YR 2/1. Soils within the wetland were saturated to the surface during the time of our field investigation.

According to the USFWS wetland classification method (Cowardin et al. 1979), Wetland D/DD would be considered to be a PSS1E (palustrine, scrub-shrub, broad-leaved deciduous, seasonally flooded/saturated), PEM2E (palustrine, emergent, non-persistent, seasonally flooded/saturated) wetland.

According to the City of Issaquah Municipal Code (IMC 18.10.620), Wetland D/DD would be considered a Category III wetland based on its overall score of 41(water quality 6, hydrologic 10, habitat 25) on the adopted Department of Ecology Wetland Rating Forms for Western Washington. Typically, Category III wetlands of this type have a 75-foot buffer measured from the wetalnd edge. A 15-foot building setback line (BSBL) is measured from the buffer edge.

3.3.3 Wetland E

Wetland E was flagged with pink "Wetland Boundary" flagging labeled E-1 through E-7. Wetland E is located along the southern property boundary near the southwest property corner.

Wetland E is a slope wetland with shrub and emergent vegetative plant communities. Vegetation within Wetland E consists of salmonberry (*Rubus spectabilis*), piggy back (*Tolmiea menziesii*), lady fern (*Athyrium Filix-femina*), and lady's thumb (*Polyganum persicaria*).

Soil pits excavated within the wetland revaled a clay silt loam A-horizon with a color of 2.5Y 4/1 and an underlying B-horizon with a color of 10YR 4/1. Soils within the wetalnd were saturated to the surface during the time of our field investigation.

According to the USFWS wetland classification method (Cowardin et al. 1979), Wetland E would be considered to be a PSS1E (palustrine, scrub-shrub, broad-leaved deciduous, seasonally flooded/saturated), PEM2E (palustrine, emergent, non-persistent, seasonally flooded/saturated) wetland.

According to the City of Issaquah Municipal Code (IMC 18.10.620), Wetland E would be considered a Category III wetland based on its overall score of 43 (water quality 10, hydrologic 10, habitat 23) on the adopted Department of Ecology Wetland Rating Forms for Western Washington. Typically, Category III wetlands of this type have a 75-foot buffer measured from the wetalnd edge. A 15-foot building setback line (BSBL) is measured from the buffer edge.

According to the City of Issaquah Code IMC §18.10.780, Cabin Creek would be considered to be a Class 2S stream. Typically Classs 2S streams located within the City of Issaquah have a 100-foot buffer measured from the OHWM. A 15-foot BSBL is measured from the buffer edge.

3.3.6 Stream C

Stream C's Ordinary High Water Mark (OHWM) was flagged with white with blue polka dot flagging labeled EC-1 through EC-9 (eastern OHWM) and WC-1 through WC-9. Stream C is located near the western property boundary to the east of Wetland E and D/DD.

Stream C flows generally from the south to the north/northwest. Stream C appears to be an intermittent stream. Stream conditions on site contain little to no fish habitat as the stream has primarily narrow and steep runs. The channel substrate is comprised of gravel with a sandy bottom. The stream is approximately 3-6 feet wide and typically 6-inches deep. Stream C flows into Cabin Creek off-site to the northwest of the property. Stream D flows into Stream C near the western OHWM flag WC-8.

No fish species were observed within Stream C, there are several non fish passable natural cascades between the site and the confluence of Stream C and Cabin Creek. Therefore, according to the City of Issaquah Municipal Code (IMC 18.10.780), Stream C would be considered a Class 3 stream due to its non-fish presence and direct connection to a fish bearing stream. Class 3 streams typically have a 50-foot buffer measured from the OHWM (IMC §18.10.785(C)). A 15-foot BSBL is measured from the buffer edge.

3.3.7 Stream D

Due to Stream D's narrow width it was not feasible to flag the OHWM. Therefore, the centerline of Stream D was flagged with white with blue polka dot flagging labeled Centerline D-1 through Centerline D-12. Stream D flows onto the site from the south and dishcarges into Stream C near Stream C's western OHWM flag WC-8.

Stream D is approximately 1-2 feet wide and surface water flows are generally 2 to 6-inches deep. Not all portions of Stream D are above ground. There are several points of Stream D where the channel disappears into underground channels and re-daylight several feet down slope. The centerline of Stream D represents the surface water conditions and best estimate of underground flows. The stream bed is comprised primarilly of gravelly sand and gravelly sandy loam areas.

No fish species were observed within Stream D, and several non-fish passable natural barriers exist between Stream D and Cabin Creek. Therefore, Stream D would be considered a Class 3 stream due to its non-fish presence and hyrdrologic connection to a fish bearing stream (IMC 18.10.780). Typically, Class 3 stream have a 50-foot buffer measured from the OHWM. Since it was not feasible to delineate the OHWM of Stream D the 50-foot buffer should be measured from the centerline flagging. A 15-foot BSBL is measured from the buffer edge.

WETLAND RATING FORM – WESTERN WASHINGTON

Name of wetland (if known): Wetland B – Issaquah Terrace

Location: SEC: _____ TWNSHP: _____ RNGE: _____ (attach map with outline of wetland to rating form)

Person(s) Rating Wetland: Aaron Will Affiliation: Sewall Wetland Consulting, Inc. Date of site visit: 4-24-07

SUMMARY OF RATING

Category based on FUNCTIONS provided by wetland

I_____ II _____ III _____ IV _____

Category I =	Score > 70
Category II =	Score 51 - 69
Category III =	Score 30 – 50
Category IV =	Score < 30

Score for Water Quality Functions	4
Score for Hydrologic Functions	8
Score for Habitat Functions	16
TOTAL Score for Functions	28

Category based on SPECIAL CHARACTERISTCS of Wetland

I_____ II_____ Does not apply _____

Final Category (choose the "highest" category from above") | 4 |

Check the appropriate type and class of wetland being rated.

Wetland Type	
Estuarine	
Natural Heritage Wetland	
Bog	
Mature Forest	
Old Growth Forest	
Coastal Lagoon	
Interdunal	
None of the above	

Wetland Class	
Depressional	X
Riverine	
Lake-fringe	
Slope	
Flats	
Freshwater Tidal	

Does the wetland being rated meet any of the criteria below?

If you answer YES to any of the questions below you will need to protect the wetland according to the regulations regarding the special characteristics found in the wetland.

Check List for Wetlands that Need Special Protection, and That are Not Included in the Rating	YES	NO
SP1. *Has the wetland been documented as a habitat for any Federally listed Threatened or Endangered plant or animal species (T/E species)?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state or federal database.		
SP2. *Has the wetland been documented as habitat for any State listed Threatened or Endangered plant or animal species?* For the purposes of this rating system, "documented" means the wetland is on the appropriate state database.		
SP3. *Does the wetland contain individuals of Priority species listed by the WDFW for the state?*		
SP4. *Does the wetland have a local significance in addition to its functions?* For example, the wetland has been identified in the Shoreline Master Program, the Critical Areas Ordinance, or in a local management plan as having special significance.		

To complete the next part of the data sheet you will need to determine the Hydrogeomorphic Class of the wetland being rated.

Wetland Name: _____ **Date:** _____

1. Are the water levels in the wetland usually controlled by tides (i.e. except during floods)?

   [NO] – go to 2 **YES – the wetland class is Tidal Fringe**

   If yes, is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

   YES – Freshwater Tidal Fringe **NO – Saltwater Tidal Fringe (Estuarine)**

   If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is a Saltwater Tidal Fringe it is rated as an Estuarine wetland. Wetlands that were call estuarine in the first and second editions of the rating system are called Salt Water Tidal Fringe in the Hydrogeomorphic Classification. Estuarine wetlands were categorized separately in the earlier editions, and this separation is being kept in this revision. To maintain consistency between editions, the term "Estuarine" wetland is kept. Please note, however, that the characteristics that define Category I and II estuarine wetlands have changed (see p. ____).

2. Is the topography within the wetland flat and precipitation is only source (>90%) of water to it.

   [NO] – go to 3 **YES – The wetland class is Flats**

   If your wetland can be classified as a "Flats" wetland, use the form for **Depressional** wetlands.

3. Does the wetland **meet both** of the following criteria?

   _____The vegetated part of the wetland is on the shores of a body of open water (without any vegetation on the surface) where at least 20 acres (8ha) are permanently inundated (ponded or flooded);

   _____At least 30% of the open water area is deeper than 6.6 (2 m)?

   [NO] – go to 4 **YES – The wetland class is Lake-fringe (Lacustrine Fringe)**

4. Does the wetland **meet all** of the following criteria?

   x_____The wetland is on a slope *(slope can be very gradual)*.

   x_____The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks.

   _____The water leaves the wetland **without being impounded?**

   NOTE: *Surface water does not pond in these types of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 foot deep).*

   [NO] – go to 5 **YES – The wetland class is Slope**

5. Is the wetland in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river? The flooding should occur at least once every two years, on the average, to answer "yes". *The wetland can contain depressions that are filled with water when the river is not flooding.*

   [NO] – go to 6 **YES – The wetland class is Riverine**

6. Is the wetland in a topographic depression in which water ponds, or is saturated to the surface, at some time of the year. *This means that any outlet, if present is higher than the interior of the wetland.*

   NO – go to 7 [YES] – The wetland class is **Depressional**

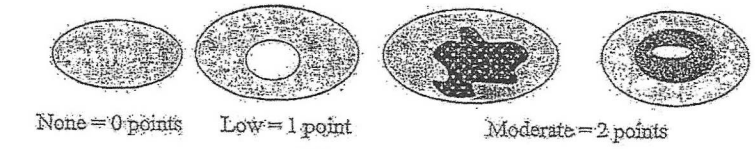
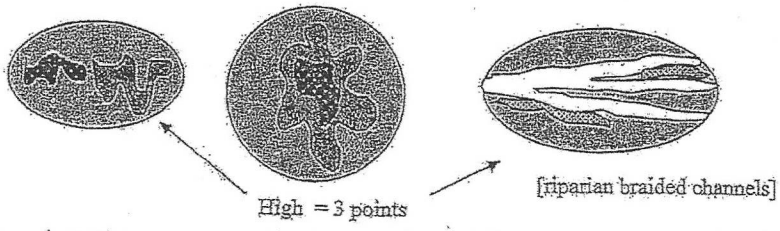
7. Is the wetland located in a very flat area with no obvious depressional and no stream or river running through it and providing water. The wetland seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

   No – go to 8 **YES – The wetland class is Depressional**

8. Your wetland seems to be difficult to classify. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a depressional wetland has a zone of flooding along its sides. Sometimes we find characteristics of several different hydrogeomorphic classes within one wetland boundary. Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within your wetland. NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland being rated. If the area of the second class is less than 10% classify the wetland using the first class.

HGM Classes Within a Delineated Wetland Boundary	Class to Use in Rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake-fringe	Lake-fringe
Depressional + Riverine along stream within boundary	Depressional
Depressional + Lake-fringe	Depressional
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE under wetlands with special characteristics

If you are unable still to determine which of the above criteria apply to your wetland, or you have more than 2 HGM classes within a wetland boundary, classify the wetland as **Depressional** for the rating.

These questions apply to wetlands of all HGM classes. HABITAT FUNCTIONS – Indicators that wetland functions to provide important habitat		Points
H 1	**Does the wetland have the potential to provide habitat for many species?**	
H 1.1	Vegetation structure *(see P. 73)*: *Check the types of vegetation classes present (as defined by Cowardin) if the class covers more than 10% of the area of the wetland or 1/4 acre.* ___ Aquatic Bed x___ Emergent plants ___ Scrub/shrub (areas where shrubs have > 30% cover) ___ Forested (areas where trees have > 30% cover) ___ Forested areas have 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover) Add the number of vegetation types that qualify. If you have: 4 types or more ... points = 4 — 3 types .. points = 2 2 types ..... points = 1 — 1 type .... points = 0	0
H 1.2	Hydroperiods *(see p.74)*: *Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 1/4 acre to count (see text for descriptions of hydroperiods).* ___ Permanently flooded or inundated ___ Seasonally flooded or inundated — 4 or more types present ..... points = 3 ___ Occasionally flooded or inundated — 3 types present ..... points = 2 x___ Saturated only — 2 types present ..... points = 1 ___ Permanently flowing stream or river in, or adjacent to, the wetland ___ Seasonally flowing stream in, or adjacent to, the wetland ___ **Lake-fringe wetland .....= 2 points** ___ **Freshwater tidal wetland.....= 2 points**	0
H 1.3	Richness of Plant Species *(see p. 76)*: Count the number of plant species in the wetland that cover at least 10 ft^2 *(different patches of the same species can be combined to meet the size threshold)* *You do not have to name the species. Do not include Eurasian Milfoil, reed canarygrass, purple loosestrife, Canadian Thistle.* — If you counted: > 19 species.....points = 2; 5 – 19 species .....points = 1; < 5 species.....points = 0 List species below (optional):	0
H 1.4	Interspersion of Habitats *(see p. 77)*: Decided from the diagrams below whether interspersion between types of vegetation (described in H1.1), or vegetation types and unvegetated areas (can include open water or mudflats) is high, medium, low, or none.  None = 0 points — Low = 1 point — Moderate = 2 points  High = 3 points — [riparian braided channels] Note: If you have 4 or more vegetation types or 3 vegetation types and open water, the rating is always "high".	0
H 1.5	Special Habitat Features *(see p. 78)*: *Check the habitat features that are present in the wetland. The number of checks is the number of points you put into the next column.* ___ Large, downed, woody debris within the wetland (> 4 in. diameter and 6 ft. long) ___ Standing snags (diameter at the bottom > 4 inches) in the wetland ___ Undercut banks are present for at least 6.6 ft. (2m) and/or overhanging vegetation extends at least 3.3 ft. (1m) over a stream for at least 33 ft. (10m) ___ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present ___ At least 1/4 acre of thin-stemmed persistent vegetation or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians) x___ Invasive plants cover less than 25% of the wetland area in each stratum of plants	1
	H 1 TOTAL Score – potential for providing habitat — *Add the points in the column above*	1

H 2.3 Near or adjacent to other priority habitats listed by WDFW (see p. 83):
Which of the following priority habitats are within 330 ft. (100m) of the wetland?
(See text for a more detailed description of these priority habitats.)

___ **Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other.

___ **Aspen Stands:** Pure or mixed stands of aspen greater than 0.8 ha (2 acres)

___ **Cliffs:** Greater than 7.6m (25 ft) high and occurring below 5000 ft.

___ **Old-growth forests:** (Old growth west of Cascade Crest) Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings, with at least 20 trees/ha (8 trees/acre) > 81cm (32 in) dbh or > 200 years of age.

x___ **Mature forests:** Stands with average diameters exceeding 53cm (21 in) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80 – 200 years old west of the Cascade Crest.

___ **Prairies:** Relatively undisturbed areas (as indicated by dominance of native plants) where greases and/or forbs form the natural climax plant community.

___ **Talus:** Homogenous areas of rock rubble ranging in average size 0.15 – 2.0m (0.5 – 6.5 ft), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs.

___ **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages.

___ **Oregon white Oak:** Woodlands stands of pure oak or oak/conifer associations where canopy coverage of the oak component of the stand is 25%.

___ **Urban Natural Open Space:** A priority species resides within or is adjacent to the open space and uses it for breeding and/or regular feeding; and/or the open space functions as a corridor connecting other *priority habitats*, especially those that would otherwise be isolated; and/or the open space is an isolated remnant of natural habitat larger than 4 ha (10 acres) and is surrounded by urban development.

___ **Estuary/Estuary-like:** Deepwater tidal habitats and adjacent tidal wetlands, usually semi-enclosed by land but with open, partly obstructed or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines there is appreciable dilution of sea water. Estuarine habitat extends upstream and landward to where ocean-derived salts measure less than 0.5 ppt. during the period of average annual low flow. Includes both estuaries and lagoons.

___ **Marine/Estuarine Shorelines:** Shorelines include the intertidal and subtidal zones of beaches, and may also include the backshore and adjacent components of the terrestrial landscape (e.g., cliffs, snags, mature trees, dunes, meadows) that are important to shoreline associated fish and wildlife and that contribute to shoreline function (e.g., sand/rock/log recruitment, nutrient contribution, erosion control).

If wetland has 3 or more priority habitats .= 4 points
If wetland has 2 priority habitats .....= 3 points
If wetland has 1 priority habit...= 1 point
No habitats .....= 0 points

1

H 2.4 Wetland Landscape: *Choose the **one** description of the landscape around the wetland that best fits* *(see p. 85)*

- There are at least 3 other wetlands within 1/2 mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, fields, or other development .....points = 5
- The wetland is Lake-fringe on a lake with little disturbance and there are 3 other lake-fringe wetlands within 1/2 mile .....points = 5
- There are at least 3 other wetlands within 1/2 mile, BUT the connections between them are disturbed.....points = 3
- The wetland fringe on a lake with disturbance and there are 3 other lake-fringe wetlands within 1/2 mile.....points = 3
- There is at least 1 wetland within 1/2 mile.....points = 2
- There are no wetlands within 1/2 mile .....points = 0

5

	H 2 TOTAL Score – opportunity for providing habitat *Add the scores in the columns above*	15
◆	**Total Score for Habitat Functions** Add the points for H 1 and H 2; then ***record the result on p. 1***	16

	H 2.3 Near or adjacent to other priority habitats listed by WDFW (see p. 83): Which of the following priority habitats are within 330 ft. (100m) of the wetland? *(See text for a more detailed description of these priority habitats.)* x **Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. ___ **Aspen Stands:** Pure or mixed stands of aspen greater than 0.8 ha (2 acres) ___ **Cliffs:** Greater than 7.6m (25 ft) high and occurring below 5000 ft. ___ **Old-growth forests:** (Old growth west of Cascade Crest) Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings, with at least 20 trees/ha (8 trees/acre) > 81cm (32 in) dbh or > 200 years of age. x **Mature forests:** Stands with average diameters exceeding 53cm (21 in) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80 – 200 years old west of the Cascade Crest. ___ **Prairies:** Relatively undisturbed areas (as indicated by dominance of native plants) where greases and/or forbs form the natural climax plant community. ___ **Talus:** Homogenous areas of rock rubble ranging in average size 0.15 – 2.0m (0.5 – 6.5 ft), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. ___ **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages. ___ **Oregon white Oak:** Woodlands stands of pure oak or oak/conifer associations where canopy coverage of the oak component of the stand is 25%. x **Urban Natural Open Space:** A priority species resides within or is adjacent to the open space and uses it for breeding and/or regular feeding; and/or the open space functions as a corridor connecting other *priority habitats*, especially those that would otherwise be isolated; and/or the open space is an isolated remnant of natural habitat larger than 4 ha (10 acres) and is surrounded by urban development. ___ **Estuary/Estuary-like:** Deepwater tidal habitats and adjacent tidal wetlands, usually semi-enclosed by land but with open, partly obstructed or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines there is appreciable dilution of sea water. Estuarine habitat extends upstream and landward to where ocean-derived salts measure less than 0.5 ppt. during the period of average annual low flow. Includes both estuaries and lagoons. ___ **Marine/Estuarine Shorelines:** Shorelines include the intertidal and subtidal zones of beaches, and may also include the backshore and adjacent components of the terrestrial landscape (e.g., cliffs, snags, mature trees, dunes, meadows) that are important to shoreline associated fish and wildlife and that contribute to shoreline function (e.g., sand/rock/log recruitment, nutrient contribution, erosion control). If wetland has 3 or more priority habitats .= 4 points If wetland has 1 priority habit...= 1 point If wetland has 2 priority habitats .....= 3 points No habitats .....= 0 points	4
	H 2.4 Wetland Landscape: *Choose the **one** description of the landscape around the wetland that best fits* *(see p. 85)* • There are at least 3 other wetlands within 1/2 mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, fields, or other development .....points = 5 • The wetland is Lake-fringe on a lake with little disturbance and there are 3 other lake-fringe wetlands within 1/2 mile .....points = 5 • There are at least 3 other wetlands within 1/2 mile, BUT the connections between them are disturbed.....points = 3 • The wetland fringe on a lake with disturbance and there are 3 other lake-fringe wetlands within 1/2 mile.....points = 3 • There is at least 1 wetland within 1/2 mile.....points = 2 • There are no wetlands within 1/2 mile .....points = 0	5
	H 2 TOTAL Score – opportunity for providing habitat. *Add the scores in the columns above*	16
◆	**Total Score for Habitat Functions** Add the points for H 1 and H 2; then ***record the result on p. 1***	23

Wetland Name: _____ Date: _____

1. Are the water levels in the wetland usually controlled by tides (i.e. except during floods)?

   NO – go to 2 **YES** – the wetland class is **Tidal Fringe**

   If yes, is the salinity of the water during periods of annual low flow below 0.5 ppt (parts per thousand)?

   YES – Freshwater Tidal Fringe **NO – Saltwater Tidal Fringe (Estuarine)**

   *If your wetland can be classified as a Freshwater Tidal Fringe use the forms for Riverine wetlands. If it is a Saltwater Tidal Fringe it is rated as an **Estuarine** wetland.* Wetlands that were call estuarine in the first and second editions of the rating system are called Salt Water Tidal Fringe in the Hydrogeomorphic Classification. Estuarine wetlands were categorized separately in the earlier editions, and this separation is being kept in this revision. To maintain consistency between editions, the term "Estuarine" wetland is kept. Please note, however, that the characteristics that define Category I and II estuarine wetlands have changed (see p. ____).

2. Is the topography within the wetland flat and precipitation is only source (>90%) of water to it.

   NO – go to 3 **YES** – The wetland class is **Flats**

   If your wetland can be classified as a "Flats" wetland, use the form for **Depressional** wetlands.

3. Does the wetland **meet both** of the following criteria?

   _____The vegetated part of the wetland is on the shores of a body of open water (without any vegetation on the surface) where at least 20 acres (8ha) are permanently inundated (ponded or flooded);

   _____At least 30% of the open water area is deeper than 6.6 (2 m)?

   NO – go to 4 **YES** – The wetland class is **Lake-fringe (Lacustrine Fringe)**

4. Does the wetland **meet all** of the following criteria?

   x_____The wetland is on a slope *(slope can be very gradual)*.

   x_____The water flows through the wetland in one direction (unidirectional) and usually comes from seeps. It may flow subsurface, as sheetflow, or in a swale without distinct banks.

   x_____The water leaves the wetland **without being impounded**?

   NOTE: *Surface water does not pond in these types of wetlands except occasionally in very small and shallow depressions or behind hummocks (depressions are usually <3 ft diameter and less than 1 foot deep).*

   NO – go to 5 YES – The wetland class is **Slope**

5. Is the wetland in a valley, or stream channel, where it gets inundated by overbank flooding from that stream or river? The flooding should occur at least once every two years, on the average, to answer "yes". *The wetland can contain depressions that are filled with water when the river is not flooding.*

   NO – go to 6 **YES** – The wetland class is **Riverine**

6. Is the wetland in a topographic depression in which water ponds, or is saturated to the surface, at some time of the year. *This means that any outlet, if present is higher than the interior of the wetland.*

   NO – go to 7 **YES** – The wetland class is **Depressional**

7. Is the wetland located in a very flat area with no obvious depressional and no stream or river running through it and providing water. The wetland seems to be maintained by high groundwater in the area. The wetland may be ditched, but has no obvious natural outlet.

   No – go to 8 **YES** – The wetland class is **Depressional**

8. Your wetland seems to be difficult to classify. For example, seeps at the base of a slope may grade into a riverine floodplain, or a small stream within a depressional wetland has a zone of flooding along its sides. Sometimes we find characteristics of several different hydrogeomorphic classes within one wetland boundary. Use the following table to identify the appropriate class to use for the rating system if you have several HGM classes present within your wetland. NOTE: Use this table only if the class that is recommended in the second column represents 10% or more of the total area of the wetland being rated. If the area of the second class is less than 10% classify the wetland using the first class.

HGM Classes Within a Delineated Wetland Boundary	Class to Use in Rating
Slope + Riverine	Riverine
Slope + Depressional	Depressional
Slope + Lake-fringe	Lake-fringe
Depressional + Riverine along stream within boundary	Depressional
Depressional + Lake-fringe	Depressional
Salt Water Tidal Fringe and any other class of freshwater wetland	Treat as ESTUARINE under wetlands with special characteristics

If you are unable still to determine which of the above criteria apply to your wetland, or you have more than 2 HGM classes within a wetland boundary, classify the wetland as **Depressional** for the rating.

These questions apply to wetlands of all HGM classes. **Points**

HABITAT FUNCTIONS – Indicators that wetland functions to provide important habitat

H 1 **Does the wetland have the potential to provide habitat for many species?**

H 1.1 Vegetation structure *(see P. 73)*:

Check the types of vegetation classes present (as defined by Cowardin) if the class covers more than 10% of the area of the wetland or 1/4 acre.

___ Aquatic Bed
x___ Emergent plants
x___ Scrub/shrub (areas where shrubs have > 30% cover)
___ Forested (areas where trees have > 30% cover)
___ Forested areas have 3 out of 5 strata (canopy, sub-canopy, shrubs, herbaceous, moss/ground-cover)

Add the number of vegetation types that qualify. If you have:

4 types or more ... points = 4 | 3 types .. points = 2
2 types ..... points = 1 | 1 type .... points = 0

Points: 1

H 1.2 Hydroperiods *(see p.74)*:

Check the types of water regimes (hydroperiods) present within the wetland. The water regime has to cover more than 10% of the wetland or 1/4 acre to count (see text for descriptions of hydroperiods).

___ Permanently flooded or inundated
x___ Seasonally flooded or inundated
x___ Occasionally flooded or inundated
x___ Saturated only
___ Permanently flowing stream or river in, or adjacent to, the wetland
x___ Seasonally flowing stream in, or adjacent to, the wetland
___ **Lake-fringe wetland .....= 2 points**
___ **Freshwater tidal wetland.....= 2 points**

4 or more types present ..... points = 3
3 types present ..... points = 2
2 types present ..... points = 1

Points: 3

H 1.3 Richness of Plant Species *(see p. 76)*:

Count the number of plant species in the wetland that cover at least 10 ft^2 *(different patches of the same species can be combined to meet the size threshold)*

You do not have to name the species. Do not include Eurasian Milfoil, reed canarygrass, purple loosestrife, Canadian Thistle.

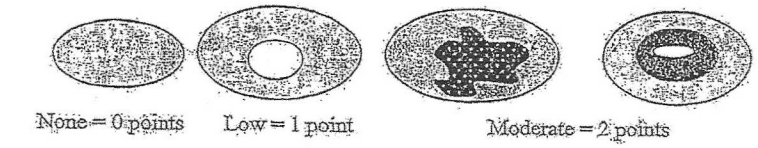
If you counted: > 19 species.....points = 2
5 – 19 species .....points = 1
< 5 species.....points = 0

List species below (optional):

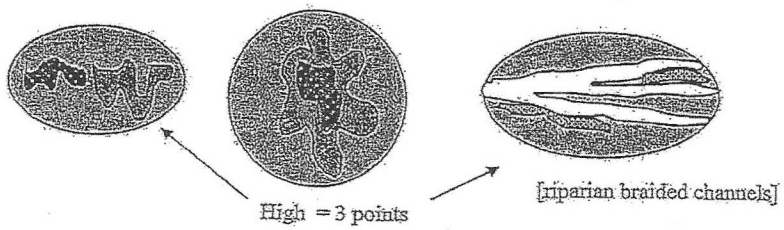
Points: 1

H 1.4 Interspersion of Habitats *(see p. 77)*:

Decided from the diagrams below whether interspersion between types of vegetation (described in H1.1), or vegetation types and unvegetated areas (can include open water or mudflats) is high, medium, low, or none.



None = 0 points | Low = 1 point | Moderate = 2 points



High = 3 points

Note: If you have 4 or more vegetation types or 3 vegetation types and open water, the rating is always "high".

Points: 2

H 1.5 Special Habitat Features *(see p. 78)*:

Check the habitat features that are present in the wetland. The number of checks is the number of points you put into the next column.

x___ Large, downed, woody debris within the wetland (> 4 in. diameter and 6 ft. long)
___ Standing snags (diameter at the bottom > 4 inches) in the wetland
___ Undercut banks are present for at least 6.6 ft. (2m) and/or overhanging vegetation extends at least 3.3 ft. (1m) over a stream for at least 33 ft. (10m)
___ Stable steep banks of fine material that might be used by beaver or muskrat for denning (> 30 degree slope) OR signs of recent beaver activity are present
___ At least 1/4 acre of thin-stemmed persistent vegetation or woody branches are present in areas that are permanently or seasonally inundated (structures for egg-laying by amphibians)
x___ Invasive plants cover less than 25% of the wetland area in each stratum of plants

Points: 2

H 1 TOTAL Score – potential for providing habitat *Add the points in the column above* **Points: 9**

	H 2.3 Near or adjacent to other priority habitats listed by WDFW (see p. 83): Which of the following priority habitats are within 330 ft. (100m) of the wetland? *(See text for a more detailed description of these priority habitats.)* x **Riparian:** The area adjacent to aquatic systems with flowing water that contains elements of both aquatic and terrestrial ecosystems which mutually influence each other. ___ **Aspen Stands:** Pure or mixed stands of aspen greater than 0.8 ha (2 acres) ___ **Cliffs:** Greater than 7.6m (25 ft) high and occurring below 5000 ft. ___ **Old-growth forests:** (Old growth west of Cascade Crest) Stands of at least 2 tree species, forming a multi-layered canopy with occasional small openings, with at least 20 trees/ha (8 trees/acre) > 81cm (32 in) dbh or > 200 years of age. x **Mature forests:** Stands with average diameters exceeding 53cm (21 in) dbh; crown cover may be less than 100%; decay, decadence, numbers of snags, and quantity of large downed material is generally less than that found in old-growth; 80 – 200 years old west of the Cascade Crest. ___ **Prairies:** Relatively undisturbed areas (as indicated by dominance of native plants) where greases and/or forbs form the natural climax plant community. ___ **Talus:** Homogenous areas of rock rubble ranging in average size 0.15 – 2.0m (0.5 – 6.5 ft), composed of basalt, andesite, and/or sedimentary rock, including riprap slides and mine tailings. May be associated with cliffs. ___ **Caves:** A naturally occurring cavity, recess, void, or system of interconnected passages. ___ **Oregon white Oak:** Woodlands stands of pure oak or oak/conifer associations where canopy coverage of the oak component of the stand is 25%. x **Urban Natural Open Space:** A priority species resides within or is adjacent to the open space and uses it for breeding and/or regular feeding; and/or the open space functions as a corridor connecting other *priority habitats*, especially those that would otherwise be isolated; and/or the open space is an isolated remnant of natural habitat larger than 4 ha (10 acres) and is surrounded by urban development. ___ **Estuary/Estuary-like:** Deepwater tidal habitats and adjacent tidal wetlands, usually semi-enclosed by land but with open, partly obstructed or sporadic access to the open ocean, and in which ocean water is at least occasionally diluted by freshwater runoff from the land. The salinity may be periodically increased above that of the open ocean by evaporation. Along some low-energy coastlines there is appreciable dilution of sea water. Estuarine habitat extends upstream and landward to where ocean-derived salts measure less than 0.5 ppt. during the period of average annual low flow. Includes both estuaries and lagoons. ___ **Marine/Estuarine Shorelines:** Shorelines include the intertidal and subtidal zones of beaches, and may also include the backshore and adjacent components of the terrestrial landscape (e.g., cliffs, snags, mature trees, dunes, meadows) that are important to shoreline associated fish and wildlife and that contribute to shoreline function (e.g., sand/rock/log recruitment, nutrient contribution, erosion control). If wetland has 3 or more priority habitats .= 4 points If wetland has 1 priority habit ...= 1 point If wetland has 2 priority habitats .....= 3 points No habitats .....= 0 points	4
	H 2.4 Wetland Landscape: *Choose the **one** description of the landscape around the wetland that best fits* *(see p. 85)* • There are at least 3 other wetlands within 1/2 mile, and the connections between them are relatively undisturbed (light grazing between wetlands OK, as is lake shore with some boating, but connections should NOT be bisected by paved roads, fill, fields, or other development .....points = 5 • The wetland is Lake-fringe on a lake with little disturbance and there are 3 other lake-fringe wetlands within 1/2 mile .....points = 5 • There are at least 3 other wetlands within 1/2 mile, BUT the connections between them are disturbed.....points = 3 • The wetland fringe on a lake with disturbance and there are 3 other lake-fringe wetlands within 1/2 mile.....points = 3 • There is at least 1 wetland within 1/2 mile.....points = 2 • There are no wetlands within 1/2 mile .....points = 0	5
	H 2 TOTAL Score – opportunity for providing habitat *Add the scores in the columns above*	16
◆	**Total Score for Habitat Functions** Add the points for H 1 and H 2; then ***record the result on p. 1***	25

ROUTINE WETLAND DETERMINATION DATA FORM

(Washington State Wetlands Identification & Delineation Manual, 1997)

SEWALL WETLAND CONSULTING, INC.
1103 West Meeker Street
Kent, Washington 98032
(253) 859-0515

Project Name/#: Issaquah Terraces Date: 4-18-07/4-24-07 Investigator: Aaron Will Data Point E-1
Jurisdiction: City of Issaquah State: WA Atypical Analysis: No Problem Area: No

VEGETATION

Dominant plant species	Stratum	Indicator	Coverage %
1. Athyrium Filix-femina	H	FAC+	
2. Rubus spectabilis	S/S	FAC+	
3. Polygonum persicaria	H	FACW	
4. Tolmiea menziesii	H	FAC	
5.			
6.			
7.			
8.			
9.			
10.			

% of species OBL, FACW and/or FAC: 100% Hydrophytic vegetation criteria met: (Yes) No Marginal
Comments:

SOILS

Mapped Soil Series: Beausite On Hydric Soils List?: Yes (No) Drainage Class: well drained

Depth(0 in)	*Matrix color*	*Redox concentration color*	*Texture*
4 in.	2.5Y 4/1		clay silt loam
16 in.	10YR 4/1		clay silt loam
in.			
in.			

Organic soil__, Histic epipedon__, Hydrogen sulfide__, gleyed__, redox concentrations__, redox depletions__, pore linings__, iron concretions__, manganese concretions__, organic matter in surface horizon (sandy soil)__, organic streaking (sandy soils)__, organic pan (sandy soil)__.
Hydric soil criteria met: (Yes) No Basis: Low chroma
Comments:

HYDROLOGY

Recorded data__, inundation_____, saturation X, watermarks_____, drift lines_____, sediment deposits_____, drainage patterns_____.
Wetland hydrology criteria met: (Yes) No Basis:
Comments:

SUMMARY OF CRITERIA

Soil Temp. at 19.7" depth:_____ Growing Season?: (Y)/N
Hydrophytic vegetation: (Y)/N Hydric soils: (Y)/N Wetland hydrology: (Y)/N
Data point meets the criteria of a jurisdictional wetland?: (Yes) No

ROUTINE WETLAND DETERMINATION DATA FORM

(Washington State Wetlands Identification & Delineation Manual, 1997)

SEWALL WETLAND CONSULTING, INC.
1103 West Meeker Street
Kent, Washington 98032
(253) 859-0515

Project Name/#: Issaquah Terraces Date: 4-18-07/4-24-07 Investigator: Aaron Will Data Point F-1
Jurisdiction: City of Issaquah State: WA Atypical Analysis: No Problem Area: No

VEGETATION

Dominant plant species	Stratum	Indicator	Coverage %
1. Athyrium Filix-femina	H	FAC+	
2. Rubus spectabilis	S/S	FAC+	
3. Equisetum hiemale	H	FACW	
4.			
5.			
6.			
7.			
8.			
9.			
10.			

% of species OBL, FACW and/or FAC: 100% Hydrophytic vegetation criteria met: (Yes) No Marginal
Comments:

SOILS

Mapped Soil Series: Beausite On Hydric Soils List?: Yes No Drainage Class: well drained

Depth(0 in)	*Matrix color*	*Redox concentration color*	*Texture*
(6 in.	10YR 5/1	many medium distinct	gravelly silt loam
in.			
in.			
in.			

Organic soil__, Histic epipedon__, Hydrogen sulfide__, gleyed__, redox concentrations__, redox depletions__, pore linings__, iron concretions__, manganese concretions__, organic matter in surface horizon (sandy soil)__, organic streaking (sandy soils)__, organic pan (sandy soil)__.

Hydric soil criteria met: Yes No Basis:
Comments:

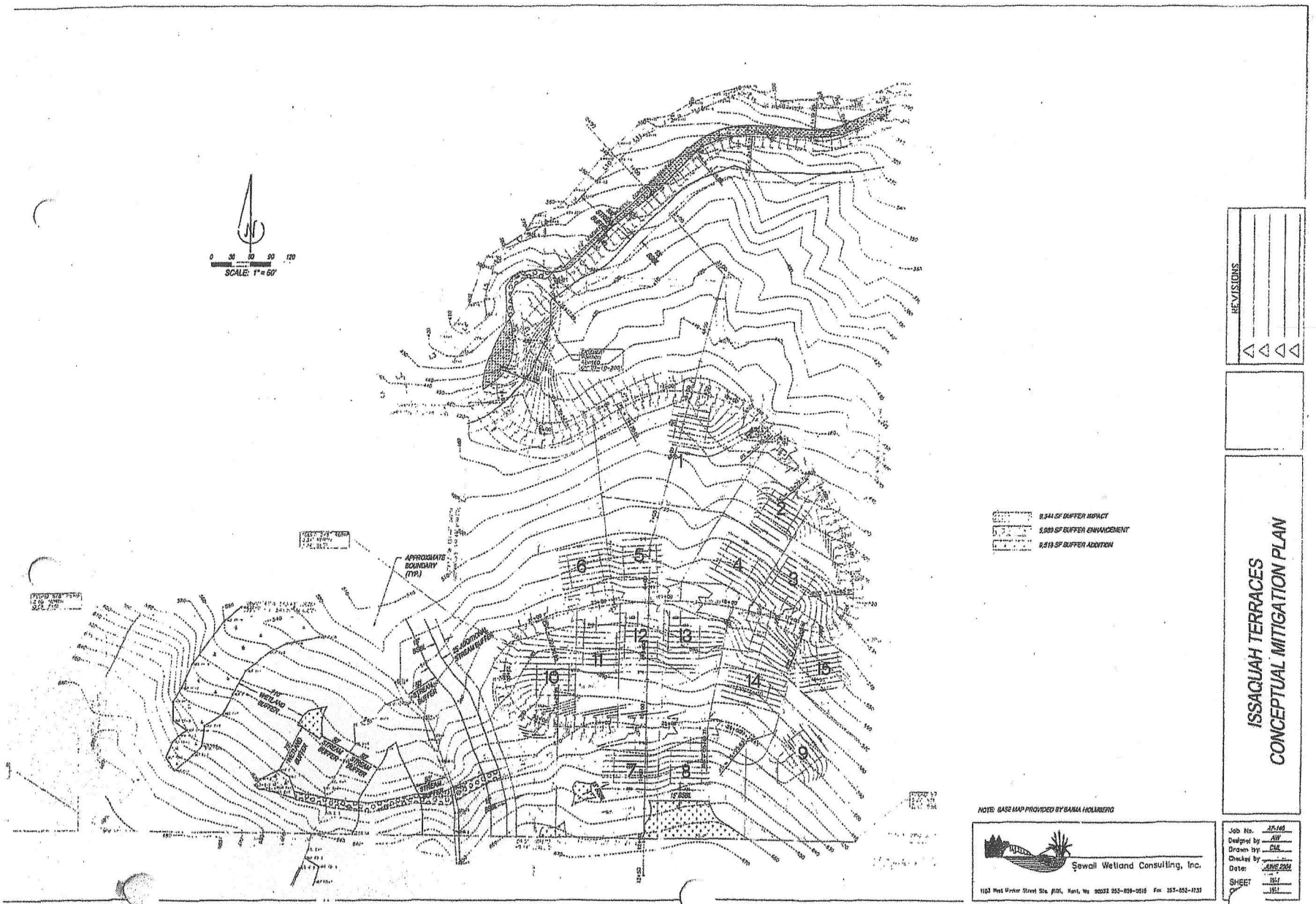
HYDROLOGY

Recorded data__, inundation_____, saturation X, watermarks_____, drift lines_____, sediment deposits_____, drainage patterns_____.

Wetland hydrology criteria met: (Yes) No Basis: Sat. to surface
Comments:

SUMMARY OF CRITERIA

Soil Temp. at 19.7" depth:_____ Growing Season?: (Y)N
Hydrophytic vegetation: (Y)/N Hydric soils: (Y)/N Wetland hydrology: (Y)/N
Data point meets the criteria of a jurisdictional wetland?: Yes No



NOTE: BASE MAP PROVIDED BY BARNA HOLMBERG

REVISIONS

ISSAQUAH TERRACES
CONCEPTUAL MITIGATION PLAN

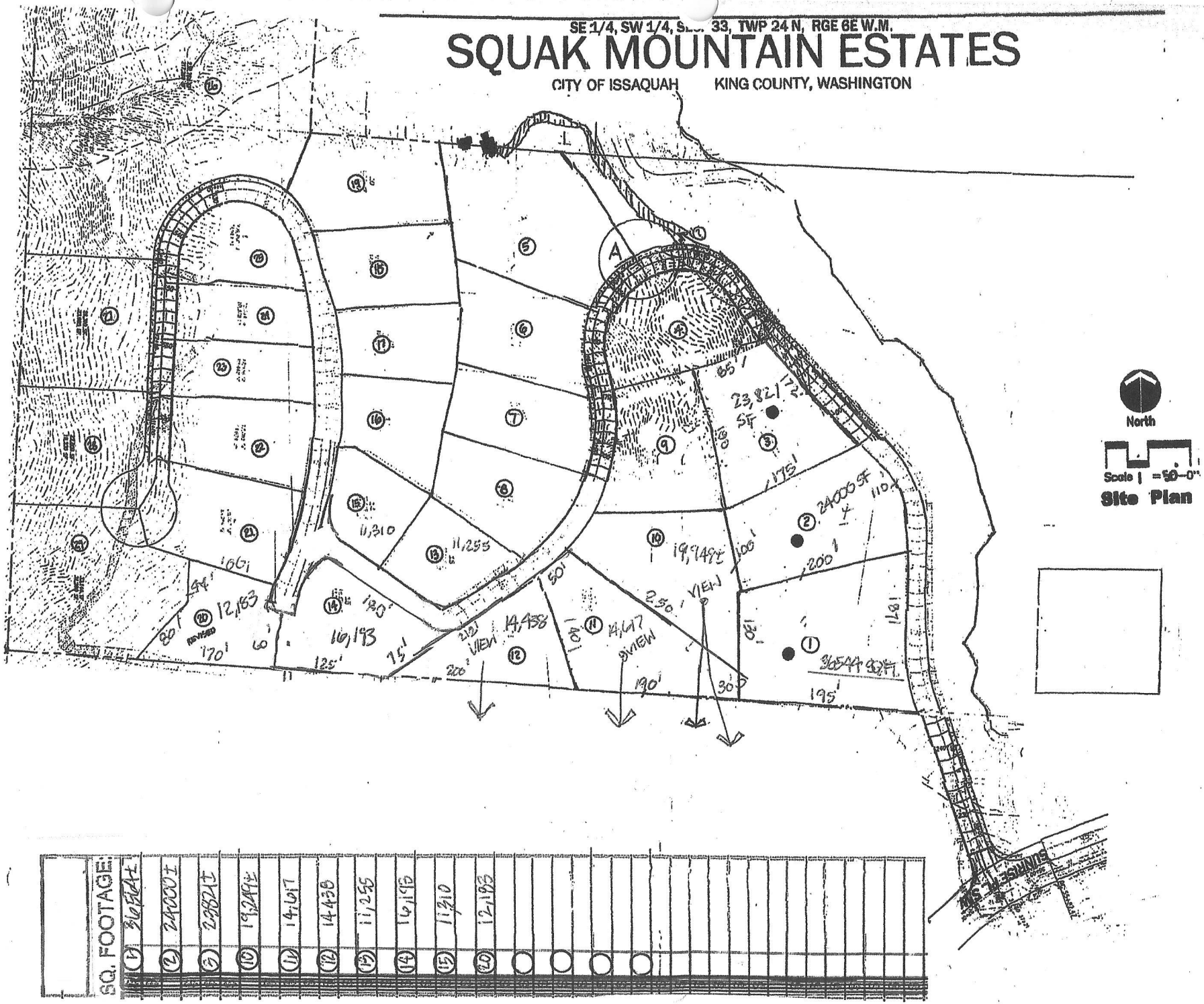
Sewall Wetland Consulting, Inc.
1103 West Meeker Street Ste. #101, Kent, Wa 98032 253-859-0515 Fax 253-852-1731

Job No. 17-146
Designed by AW
Drawn by CHS
Checked by
Date: JUNE 2004
SHEET 1 of 1

SE 1/4, SW 1/4, SEC. 33, TWP 24 N, RGE 6E W.M.

SQUAK MOUNTAIN ESTATES

CITY OF ISSAQUAH KING COUNTY, WASHINGTON



PROJECT:
SQUAK MOUNTAIN ESTATES
SE 1/4, SW 1/4, SEC. 33, TWP 24 N, RGE 6E W.M.
CITY OF ISSAQUAH KING COUNTY, WASHINGTON

REVISIONS	BY
1	
2 5/10/17	

DRAWING BY:
CHECKED BY:
DATE: 4/6/17
SCALE:
SHEET: SP-100

TOPOGRAPHICAL SITE SURVEY

FOR CHRIS WEYMOUTH

LOCATED IN THE S.E. 1/4 AND THE S.W. 1/4, OF THE S.E. 1/4, OF SECTION 33, TOWNSHIP 24 NORTH, RANGE 6 EAST, W.M., KING COUNTY, WASHINGTON

N

W E

S

GRAPHIC SCALE 1" = 60'

60 0 60

OF BEARINGS:

SHOWN HEREON ARE BASED ON THE SOUTH LINE OF THE SOUTHEAST QUARTER OF SECTION 33, T.24N., R.6E., W.M., AS S01°10'17"E EAST PER STATUTORY WARRANTY DEED UNDER RECORDING NO. 9904282721, RECORDS OF KING COUNTY, WASHINGTON

DESCRIPTION:

STATUTORY WARRANTY DEED REC. #9904282721

THAT PORTION OF THE SOUTHEAST QUARTER OF SECTION 33, TOWNSHIP 24 NORTH, RANGE 6 EAST, W.M., IN KING COUNTY, WASHINGTON, DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTH QUARTER CORNER OF SAID SECTION 33; THENCE SOUTH 88°52'51" EAST ALONG THE SOUTH LINE THEREOF 797.51 FEET TO THE TRUE POINT OF BEGINNING;

THENCE CONTINUING SOUTH 88°52'51" EAST ALONG SAID SOUTH LINE 1159.15 FEET TO A POINT WHICH IS DISTANT 700.00 FEET FROM THE SOUTHEAST CORNER OF SAID SECTION; THENCE NORTH 2°02'09" EAST PARALLEL TO THE EAST LINE OF SAID SECTION 1,600 FEET, MORE OR LESS, TO THE CENTER LINE OF CABIN CREEK; THENCE SOUTHWESTERLY ALONG THE CENTER OF SAID CABIN CREEK, 1,600 FEET, MORE OR LESS, TO THE NORTH LINE OF THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 33; THENCE SOUTH 88°53'09" EAST ALONG SAID NORTH LINE 145 FEET, MORE OR LESS, TO THE EAST LINE OF SAID NORTH HALF; THENCE SOUTH 2°12'33" WEST ALONG SAID EAST LINE 334.66 FEET TO THE SOUTH LINE OF SAID NORTH HALF; THENCE NORTH 89°01'43" WEST ALONG SAID SOUTH LINE 543.45 FEET TO A POINT WHICH BEARS NORTH FROM THE TRUE POINT OF BEGINNING; THENCE SOUTH 337.26 FEET TO THE TRUE POINT OF BEGINNING.

TOGETHER WITH AN EASEMENT 30 FEET WIDE FOR INGRESS, EGRESS AND UTILITIES, THE CENTER LINE BEING:

BEGINNING AT THE INTERSECTION OF WILDWOOD BOULEVARD SOUTH AND SUNRISE PLACE SOUTHWEST; THENCE SOUTH 1°47'29" WEST ALONG THE CENTER LINE OF SAID SUNRISE PLACE SOUTHWEST TO THE TERMINATION OF SAID SUNRISE PLACE SOUTHWEST AND THE TRUE POINT OF BEGINNING; THENCE SOUTH 25°37'08" WEST A DISTANCE OF 48.76 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID LINE; THENCE SOUTHERLY ALONG THE CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 147.23 FEET AND A CENTRAL ANGLE OF 26°44'09" A DISTANCE OF 68.73 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID CURVE; THENCE SOUTH 1°06'59" EAST TANGENT TO SAID CURVE, A DISTANCE OF 98.19 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID LINE; THENCE SOUTHERLY AND SOUTHEASTERLY A DISTANCE OF 151.29 FEET ALONG THE CURVE CONCAVE TO THE EAST, HAVING A RADIUS OF 509.00 FEET AND A CENTRAL ANGLE OF 17°01'51"; THENCE SOUTH 18°12'31" EAST TANGENT TO SAID CURVE, A DISTANCE OF 67.67 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID LINE; THENCE SOUTHERLY, SOUTHERLY AND SOUTHWESTERLY A DISTANCE OF 49.73 FEET ALONG THE CURVE CONCAVE TO THE WEST, HAVING A RADIUS OF 30.00 FEET AND A CENTRAL ANGLE OF 94°58'42" THENCE SOUTH 68°48'11" WEST TANGENT TO SAID CURVE, A DISTANCE OF 92.48 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID LINE; THENCE SOUTHWESTERLY AND WESTERLY A DISTANCE OF 48.73 FEET ALONG THE CURVE CONCAVE TO THE NORTH, HAVING A RADIUS OF 150.00 FEET AND A CENTRAL ANGLE OF 18°36'15" THENCE NORTH 87°27'13" WEST TANGENT TO SAID CURVE, A DISTANCE OF 67.67 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID LINE; THENCE WESTERLY AND NORTHWESTERLY A DISTANCE OF 81.51 FEET (81.51 FEET) ALONG THE CURVE CONCAVE TO THE NORTHEAST, HAVING A RADIUS OF 100.00 FEET AND A CENTRAL ANGLE OF 46°42'13" THENCE NORTH 40°45'00" WEST TANGENT TO SAID CURVE A DISTANCE OF 257.60 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID LINE; THENCE SOUTHWESTERLY AND WESTERLY A DISTANCE OF 81.51 FEET ALONG THE CURVE CONCAVE TO THE NORTH, HAVING A RADIUS OF 100.00 FEET AND A CENTRAL ANGLE OF 46°42'13" THENCE NORTH 83°13'09" WEST, A DISTANCE OF 45.15 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID LINE; THENCE SOUTHWESTERLY AND SOUTHERLY A DISTANCE OF 48.07 FEET ALONG THE CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 25.00 FEET AND A CENTRAL ANGLE OF 110°11'55" THENCE SOUTH 06°49'03" EAST TANGENT TO SAID CURVE, A DISTANCE OF 39.15 FEET TO THE BEGINNING OF A CURVE TANGENT TO SAID LINE; THENCE SOUTHERLY AND SOUTHWESTERLY A DISTANCE OF 63.08 FEET ALONG THE CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 50.00 FEET AND A CENTRAL ANGLE OF 72°16'12" THENCE SOUTH 53°28'12" WEST TANGENT TO SAID CURVE, A DISTANCE OF 39.15 FEET, MORE OR LESS TO A TERMINATION POINT ON THE NORTH LINE OF THE NORTH HALF OF THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 33, TOWNSHIP 24 NORTH, RANGE 6 EAST, W.M., KING COUNTY.

LINE	BEARING	DISTANCE
L1	N15°43'46"E	35.48'
L2	N52°59'47"E	69.68'
L3	N65°54'40"E	85.16'
L4	N34°24'50"E	72.05'
L5	N16°42'52"E	64.73'
L6	N42°16'49"E	31.67'
L7	N49°04'19"E	63.13'
L8	N75°03'58"E	32.21'
L9	N43°42'20"E	81.31'
L10	N42°08'50"E	66.26'
L11	N83°31'39"E	60.53'
L12	N73°14'24"E	52.23'
L13	N67°04'18"E	48.86'
L14	N76°33'25"E	58.83'
L15	S31°56'43"E	37.85'
L16	N85°45'51"E	54.71'
L17	S89°56'24"E	63.87'
L18	N84°34'24"E	52.66'
L19	N68°27'23"E	23.00'

CENTERLINE OF CABIN CREEK AS LOCATED FEBRUARY 2003

SITE BENCHMARK

N88°52'51"W 140.72' (DEED)
S88°53'09"E ±145' (DEED)

STRUCTURE ±0.90' EAST OF PROPERTY LINE

FOUND 5/8" REBAR 0.37' NORTH 1.94' WEST

S2°12'33"W 334.66' (DEED)
N2°10'09"E 334.49' (CALC'D)

FOUND 5/8" REBAR 0.40' NORTH 3.99' EAST

N89°01'43"W 543.45' (DEED)
S89°01'35"E 543.50' (CALC'D)

FOUND 5/8" REBAR 0.70' NORTH 0.97' WEST

NORTH 337.26' (DEED)
N00°00'00"E 335.81' (CALC'D)

797.51' (DEED & CALC'D)

S89°10'17"E (DEED) 2656.65' (CALC'D)
(BASIS OF BEARINGS)

1483.31' (DEED)
1483.34' (CALC'D)

SQUAK MT. ST. PK.

TYP. 6" X 6" CONCRETE MONUMENT W/ 5" BRASSIE & PUNCH

CAL DATUM:

MARK:
NAIL IN SEAM
CRETE DRIVEWAY
0.00' (ASSUMED)

OUR INTERVAL:
5 FEET

PRELIMINARY SLOPE ANALYSIS - (FOR STUDY PURPOSE ONLY)

SLOPES: 7/10/12

- LESS THAN 25
- 25% TO 29
- 30% TO 39%
- 40% OR MORE